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09/495,207	01/31/2000	Robert E. Robotham	1400.4100242	4551

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EXAMINER
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WEIDNER, TIMOTHY J

ART UNIT	PAPER NUMBER
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2419

MAIL DATE	DELIVERY MODE
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01/13/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/495,207	<b>Applicant(s)</b> ROBOTHAM, ROBERT E.	
	<b>Examiner</b> Timothy J. Weidner	<b>Art Unit</b> 2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

Claims 1-37 are pending.

Claims 35-37 are currently amended.

### ***Response to Arguments***

In response to applicant's arguments filed October 31, 2008:

Applicant's arguments, see pages 11-13, with respect to double patenting, have been fully considered and are persuasive. Therefore, the rejections have been withdrawn.

Applicant's arguments, see page 13, with respect to rejection of claims 1, 17, and 25 under 35 USC 112, 2nd paragraph, have been fully considered but they are not persuasive. The reason "queuing the identity" is unclear is because it lacks antecedent basis in the claims, which makes it unclear what is being referred to. The previous objection merely provided an opportunity for applicant to grammatically fix the limitation "queuing identity", and only provided an example, not a strict requirement, of how to change, not necessarily how to permanently fix the limitation. Therefore, the rejections are maintained.

Applicant's arguments, see page 14, with respect to rejection of claims 35-37 under 35 USC 112, 2<sup>nd</sup> paragraph, have been fully considered and are persuasive. Therefore, the rejections have been withdrawn.

Applicant's arguments, see page 14, paragraph 4, with respect to rejection of claims 1, 10, 17, and 25 under 35 USC 103, have been fully considered but they are not

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persuasive. Applicant states Examiner may not teach "...when data that constitute a complete packet are buffered in a corresponding buffer." Applicant appears not to recognize that Examiner cited Sorinsuo for maintaining a state of whether a complete packet is buffered (column 9, lines 14-16), which is what provides a reasonable expectation of success in combination with Shimojo. Further, Applicant states Examiner may not give any suggestion or motivation to combine. The motivation to combine was given in the rejection, which is to associate the VCI with various connection parameters, and to output the data accordingly. Therefore, the rejections are maintained.

Applicant's arguments, see page 15, paragraph 2, with respect to rejection of claims 1, 10, 17, and 25 under 35 USC 103, have been fully considered but they are not persuasive. Applicant states Examiner may not teach "prioritization." The cited portion of Sorinsuo teaches obtaining prioritization information for the merged virtual connection by teaching certain packets may dropped, buffered ordinarily, or buffered in a bypass queue (columns 9 and 9-10, lines 17-32 and 64-4 respectively), which is the same concept as prioritization. Therefore, the rejections are maintained.

Applicant's arguments, see page 15, paragraph 3, with respect to rejection of claims 1, 10, 17, and 25 under 35 USC 103, have been fully considered but they are not persuasive. Applicant states Examiner may not teach "a merged identifier" by citing figure 9, item 960, X. Sorinsuo was cited to be considered as a whole, for example referring also to figure 9, item 930, where "X" not only refers to the letter "X," but to "VCCout" where one of ordinary skill in the art would understand that "X" represents a

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merged identifier. The cited portions should be considered in context and as a whole to be fully understood. Therefore, the rejections are maintained.

Applicant's arguments, see page 15, paragraph 4, with respect to rejection of claim 25 under 35 USC 103, have been fully considered but they are not persuasive. Applicant states Examiner may not teach "different classes receive priority for different ones of the intervals" because the cited portions of Shimojo may be in different contexts. The Shimojo reference was used to show class-prioritized dequeuing in intervals (columns 24 and 25, lines 39-46 and 3-8). They are in the same context of class-prioritized buffers Ba1 and Ba2. Therefore, the rejection is maintained.

Applicant's arguments, see page 16, paragraph 2, with respect to rejection of claims 2, 18, and 26 under 35 USC 103, have been fully considered but they are not persuasive. Applicant states Examiner may not teach "based on the prioritization information." The cited portion of Sorinsuo teaches obtaining prioritization information for the merged virtual connection by teaching certain packets may dropped, buffered ordinarily, or buffered in a bypass queue (columns 9 and 9-10, lines 17-32 and 64-4 respectively), which is the same concept as prioritization. Therefore, the rejections are maintained.

Applicant's arguments, see page 16, paragraph 3, with respect to rejection of claims 3, 11, 19, and 27 under 35 USC 103, have been fully considered but they are not persuasive. Applicant states Examiner may not teach "the prioritization information includes class prioritization information." Sorinsuo teaches priorities (column 10, lines 30-31) and classes (column 7, lines 42-50). Also recognize Sorinsuo was combined

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with Shimojo for these limitations, i.e. applicant's arguments are incomplete because they are based solely on Sorinsuo. Therefore, the rejections are maintained.

Applicant's arguments, see page 17, paragraph 2, with respect to rejection of claims 4, 12, 20, and 28 under 35 USC 103, have been fully considered but they are not persuasive. Applicant states Examiner may not teach "linked list". The cited portions of Sorinsuo teach a list, and Shimojo teaches a chain of buffer pointers which is the same concept as a linked list. Therefore, the rejections are maintained.

Applicant's arguments, see page 17, paragraph 3, with respect to rejection of claims 5, 13, 21, and 29 under 35 USC 103, have been fully considered but they are not persuasive. Applicant states Examiner may not teach "prioritization." The cited portion of Sorinsuo teaches obtaining prioritization information for the merged virtual connection by teaching certain packets may dropped, buffered ordinarily, or buffered in a bypass queue (columns 9 and 9-10, lines 17-32 and 64-4 respectively), which is the same concept as prioritization. Therefore, the rejections are maintained.

Applicant's arguments, see page 17, paragraph 4, with respect to rejection of claims 6, 22, and 30 under 35 USC 103, have been fully considered but they are not persuasive. Applicant states Examiner may not teach "a prioritization table that stores an accessing sequence for the plurality of queues." The cited portion of Sorinsuo teaches a buffer state list including priorities, i.e. a prioritization table, using scheduling such as round-robin, fair, weighted, prioritized, etc. for the buffers/queues (column 10, lines 22-42). Therefore, the rejections are maintained.

Applicant's arguments, see page 18, paragraph 2, with respect to rejection of claims 8, 24, and 32 under 35 USC 103, have been fully considered but they are not persuasive. Applicant states Examiner may not teach "determining that data that constitute a complete packet are buffered." The rejection should be read in the full context, including the claim from which it depends. The cited portions include an end of message indication that indicates a final cell for the complete packet, and maintaining a state that indicates a complete packet is received (column 9, lines 7-16). Therefore, the rejection is maintained.

Applicant's arguments, see page 18, paragraph 3, with respect to rejection of claims 9 and 33 under 35 USC 103, have been fully considered but they are not persuasive. Applicant states Examiner may not teach "combining the data stream for the merged virtual connection with a data stream corresponding to an additional virtual connection." Examiner not only cited figure 9, item 934, as applicant states, but also cited column 9, lines 39-51 in the rejection to provide a complete explanation. The argument appears incomplete. Therefore, the rejection is maintained.

Applicant's arguments, see page 18, paragraph 4, with respect to rejection of claim 14 under 35 USC 103, have been fully considered but they are not persuasive. Applicant states Examiner may not teach "the prioritization information causes..." Although the argument only recognizes Examiner's citation of the Sorinsuo reference, the Shimojo reference was cited in combination for these limitations. The argument appears incomplete. Therefore, the rejection is maintained.

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Applicant's arguments, see page 19, paragraph 2, with respect to rejection of claims 15 and 16 under 35 USC 103, have been fully considered but they are not persuasive. Applicant states Examiner may not teach "is included in an ingress (or egress) portion of a communication switch." Examiner respectfully disagrees. One of ordinary skill in the art would recognize Sorinsuo as a reasonable teaching that the controller is included in the ingress/egress portion. The rejection included an example, reiterated here, from the Sorinsuo reference which teaches "those skilled in the art will recognize that the present invention may be implemented as stand-alone chip on the output data path, or integrated in the switch buffer management." Therefore, the rejections are maintained.

Applicant's arguments, see page 19, paragraph 3, with respect to rejection of claim 34 under 35 USC 103, have been fully considered but they are not persuasive. Examiner relies primarily on MPEP 2112 sections IV and V in using inherency. A rationale was provided in the rejection that every queue/buffer has a limited size, i.e. a finite amount of storage, thereby limiting the amount of information, i.e. a number of times the identity of the virtual connection, can be stored. The burden of proof is on the Applicant, not the Examiner, to provide evidence to the contrary, i.e. a queue/buffer with unlimited size. Therefore, the rejection is maintained.

Applicant's arguments, see page 20, paragraph 1, with respect to rejection of claim 35 under 35 USC 103, have been fully considered but they are not persuasive. Applicant argues Examiner relies only upon Sorinsuo to reject the limitations, however

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Shimojo was used in combination. Argument appears incomplete. Therefore, the rejection is maintained.

Applicant's arguments, see page 20, paragraph 2, with respect to rejection of claim 36 under 35 USC 103, have been fully considered but they are not persuasive. Applicant states Examiner may not teach "class prioritization information". The rejections should be read in context and as a whole including the claims from which claim 36 depends. For example, provided in the rejection of claim 3, "flows may include VCCs and different classes (column 20, lines 1-9)." While applicant notes the cited column 21, lines 62-67, it should be understood in combination with that stated above. Therefore, the rejection is maintained.

Applicant's arguments, see page 20, paragraph 3, with respect to rejection of claim 37 under 35 USC 103, have been fully considered but they are not persuasive. Applicant states Examiner may not teach "wherein when a particular class has a priority, including a predetermined number of packets corresponding to that class in the data stream." Applicant's argument only recognizes Sorinsuo, column 10, lines 30-31, however the rejection was combination of Sorinsuo and Shimojo including detailed explanations and citations of the above noted limitations. Argument appears incomplete. Therefore, the rejections are maintained.

#### ***Oath/Declaration***

This application presents a claim for subject matter not originally claimed or embraced in the statement of the invention. Claims 34-37 were newly added claims in an amendment filed 02/21/2008 which were not provided with the original claims, and

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were not in the brief summary commensurate with the claimed invention. A supplemental oath or declaration is required under 37 CFR 1.67. The new oath or declaration must properly identify the application of which it is to form a part, preferably by application number and filing date in the body of the oath or declaration. See MPEP §§ 602.01 and 602.02. Also see MPEP § 603 and 37 CFR 1.67(b).

### ***Specification***

The disclosure is objected to because of the following informalities: There is no brief summary of the invention. A brief summary should be provided commensurate, and consistent with, the claims. See MPEP 608.01(d) and 37 CFR 1.73.

Appropriate correction is required.

Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 17, and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 17, and 25 recite the limitation "queuing the identity" in lines 6, 9, and 6 respectively. There is insufficient antecedent basis for this limitation in the claims. This limitation appears to rely on "each of the plurality of virtual connections is identified by an identifier" in lines 4-5, 7-8, and 4-5 respectively, but there may be a difference between "identifier" and "identity".

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sorinsuo et al. (US 6,148,001) in view of Shimojo (US 6,934,296 B2).

Regarding claims 1, 10, 17, and 25, Sorinsuo teaches cells are received for buffering from multiple incoming virtual channel connections (VCC) (column 9, lines 52-59), where each of the VCCs is identified by a virtual connection identifier (VCI) (column 9, lines 2-4). Further, the state is maintained for each incoming VCC, which indicates whether the buffer of that VCC contains one or more complete packets (column 9, lines 14-16), where there may be one or more buffers (column 4, lines 1-2), but may not explicitly teach queuing the identity.

Shimojo, which is in the same field of endeavor, teaches queuing a VCI for use in a buffer pointer management unit that associates the VCI with various connection

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parameters, and for outputting the data accordingly (columns 17 and 18, lines 19-31 and 49-57 respectively). It would have been obvious to one of ordinary skill in the art at the time the invention was made to queue the identity for when data that constitute a complete packet is buffered to associate the VCI with various connection parameters, and to output the data accordingly.

Sorinsuo further teaches various priority options including the treatment of OAM cells (columns 9-10, lines 64-4), i.e. obtaining prioritization information. Packets are transmitted in the order that complete packets are received including when OAM cells are buffered as ordinary cells, i.e. based on the prioritization information and queued identities described above (column 9, lines 57-64), where the transmission is done using a single VCC, i.e. merged identifier (column 9, lines 39-43), and where each unit of data in the transmission includes the merged identifier (figure 9, item 960, X).

Further, regarding claim 25, Sorinsuo teaches scheduling can support priorities (column 10, lines 30-31) and classes (column 7, lines 42-50), but may not explicitly teach dequeuing of data is performed in intervals, where different classes receive priority for different ones of intervals. Shimojo teaches dequeuing of data is performed in intervals (column 25, lines 3-8), where different classes receive priority for different ones of the intervals (column 24, lines 39-46) for the purpose of avoiding underflow (column 24, lines 48-59). It would have been obvious to one of ordinary skill in the art at the time the invention was made to dequeue data in intervals, where different classes receive priority for different ones of intervals to avoid underflow.

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Regarding claims 2, 18, and 26, Sorinsuo teaches various priority options including the treatment of OAM cells (columns 9-10, lines 64-4), i.e. obtaining prioritization information. Packets are transmitted in the order that complete packets are received including when OAM cells are buffered as ordinary cells, i.e. based on the prioritization information (column 9, lines 57-64).

Regarding claims 3, 11, 19, and 27, Sorinsuo teaches scheduling can support priorities (column 10, lines 30-31) and classes (column 7, lines 42-50), but may not explicitly teach the queue includes a plurality of queues corresponding to a plurality of classes, wherein queueing the identity includes doing so into one of the queues based on class.

Shimojo teaches the queues includes a plurality of queues corresponding to classes (column 24, lines 39-46), and likewise teaches the flows may include VCCs and different classes (column 20, lines 1-9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to queue the identity into one of a plurality of queues based on class to associate the VCI with various connection parameters, and to output the data accordingly.

Regarding claims 4, 12, 20, and 28, Sorinsuo teaches scheduling includes going through a buffer state list (column 10, lines 22-24), but may not explicitly teach each of the plurality of queues is a linked list.

Shimojo teaches each of the queues is implemented using a chain of buffer pointers (column 18, lines 37-38), i.e. linked list, wherein queueing the identity includes appending the identity to a tail of one of the linked lists (columns 18 and 19, lines 56-57

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and 1-2) where the queues are based on class (column 24, lines 39-46) for the purpose of an easily searchable structure. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have each of the plurality of queues as a linked list, and append the identity to a tail of one of the lists based on class to have an easily searchable structure.

Regarding claims 5, 13, 21, and 29, Sorinsuo teaches the prioritization information may include class (column 7, lines 42-50), and further outputs the packets on a single VCC (column 8, lines 25-35), i.e. allocates bandwidth on the merged virtual connection based on class.

Regarding claims 6, 22 and 30, Soirinsuo teaches prioritization information further comprises referencing a prioritization table (e.g., scheduler supporting priorities, see col. 10, lines 22-42) that stores an accessing sequence (e.g., buffer state list or weighted scheduling) for the plurality of queues.

Regarding claims 7, 23 and 31, Soirinsuo teaches generating the cell stream such that cells corresponding to different packets that are combined to produce the merged virtual connection are not intermingled (e.g., see col. 10, lines 29-35).

Regarding claims 8, 24 and 32, Soirinsuo teaches detecting an end of message indication that indicated a final cell for the complete packet (e.g., see col. 9, lines 7-8).

Regarding claims 9 and 33, Sorinsuo teaches merging multiple incoming VCCs into a single outgoing VCC, and upon completion of transmission of a packet from one incoming VCC, transmits a packet from another incoming VCC (column 9, lines 39-51), i.e. combines the data stream for the merged connection with an additional virtual

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connection, where the incoming VCCs are identified differently than the outgoing VCC (figure 9, item 934, VCCin/VCCout).

Regarding claim 14, Sorinsuo teaches scheduling can support priorities (column 10, lines 30-31) and classes (column 7, lines 42-50), but may not explicitly teach the prioritization information causes transitions between classes for dequeuing based on a number of packets for a particular class.

Shimojo teaches dequeuing of data is performed in intervals (column 25, lines 3-8), where different classes receive priority for different ones of the intervals (column 24, lines 39-46) based on the number of packets for a particular class (column 24, lines 65-67) for the purpose of avoiding underflow (column 24, lines 48-59). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the prioritization information cause transitions between classes for dequeuing based on the number of packets for a particular class to avoid underflow.

Regarding claims 15 and 16, Sorinsuo teaches the virtual connection merging system is included in a switch controller (figure 11, item 1120; column 10, lines 13-15) which is connected to the line interface having input/output ports (column 10, lines 8-10), i.e. in the ingress/egress portion of a switch. Further, Sorinsuo teaches that it may be part of a chip on the output data path (column 10, lines 35-38), i.e. egress portion.

Regarding claim 34, Shimojo inherently teaches limiting the number of times the identity of the virtual connection may be stored in the queue because a queue always has a limited size, thereby limiting the amount of information that can be stored.

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Regarding claim 35, Sorinsuo teaches scheduling can support priorities (column 10, lines 30-31) and classes (column 7, lines 42-50), but may not explicitly teach reverting to a highest priority.

Shimojo teaches generating a data stream with priority control among classes by issuing transfer commands in intervals (column 25, lines 3-8) where part of the background is referred to (column 24, lines 39-49). The background referred to teaches issuing a transfer command to a class-1 queue when the number of cells  $N_a$  in the class-2 queue is zero (column 6, lines 1-4), i.e. the class-1 queue is a highest priority class when class-2 is empty, for the purpose of avoiding a vain-command. It would have been obvious to one of ordinary skill in the art to revert the priority for the particular interval to a highest priority class to avoid a vain-command.

Regarding claim 36, Sorinsuo teaches the scheduler goes through a buffer state list (column 10, lines 22-24), but may not explicitly teach incrementing a pointer within a prioritization information table when a first class does not have data to transmit during a particular interval.

Shimojo teaches a number of flows relating to a number of classes (column 20, lines 1-9). When the stored amount of data for a particular flow is zero, determined by referencing a flow table (column 21, lines 62-67), i.e. class prioritization information table, a pointer within the table is changed (column 22, lines 20-30) for the purpose of determining a packet group to which a newly input cell should be entered. It would have been obvious to one of ordinary skill in the art at the time the invention was made to

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increment a pointer within a prioritization information table to determine a packet group to which a newly input cell should be entered.

Regarding claim 37, Sorinsuo teaches scheduling can support priorities (column 10, lines 30-31) and classes (column 7, lines 42-50), but may not explicitly teach transmitting a number of packets during each interval, including a predetermined number of packets corresponding to a particular class.

Shimojo teaches transmitting a predetermined number of packets  $M_2$  during an interval (column 25, lines 3-8) corresponding to a particular class (column 24, lines 39-46) for the purpose of avoiding underflow (column 24, lines 48-59). It would have been obvious to one of ordinary skill in the art at the time the invention was made to transmit a predetermined number of packets during each interval to avoid underflow.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lorrain et al. (US 6636512 B1) and Hughes et al. (US 6512744 B1) teach systems for merging virtual connections.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Weidner whose telephone number is (571) 270-1825. The examiner can normally be reached on Monday - Friday, 8:00 AM - 5:00 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Timothy J Weidner/  
Examiner, Art Unit 2419

/Edan Orgad/

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Supervisory Patent Examiner, Art Unit 2419